



JENNIFER M. GRANHOLM
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF TRANSPORTATION
LANSING

KIRK T. STEUDLE
DIRECTOR

February 2, 2007

Mr. John D. Niemela
Director
County Road Association of Michigan
P.O. Box 12067
Lansing, Michigan 48901-2067

Mr. Joseph A. Fivas
Assistant Director, State Affairs
Michigan Municipal League
320 N. Washington Sq., Ste. 100
Lansing, Michigan 48933-1288

Dear Mr. Niemela and Mr. Fivas:

LOCAL BRIDGE PROGRAM
DEADLINE FOR APPLICATIONS – JUNE 1, 2007
(Limit of 5 Applications per Agency)

We are soliciting applications for candidate projects for the Local Bridge Program. Selected projects will be funded during the 2010 fiscal year. Enclosed are the application requirements. Do not submit projects which cannot be committed to construction within the 2010 fiscal year. The applications must be submitted by the local agency owner. Applications received directly from a consultant will be rejected and returned to the local agency. **The total number of applications from any local agency is limited to five (5). Submitting more than five applications from one agency will be cause to reject all applications submitted.**

To be eligible for bridge funds, the structure must meet the definition of a bridge. A bridge is defined as a structure with a total clear span of more than 20 feet, measured along the centerline of the roadway over a stream, watercourse, or opening. For a span bridge, this means that the clear opening span, measured face to face of the inside of the abutments, is greater than 20 feet. Multi-unit culverts are considered bridges if the total length as measured along the centerline of the roadway is greater than 20 feet and if the distance between the culvert units is less than half the diameter of the smallest unit. This description is referenced in item number 112 of the "Michigan Structure Inventory and Appraisal Coding Guide." There are many multi-unit culverts under local agency jurisdiction that qualify as bridges, and thus, are required to be on the structure inventory and regularly inspected. Please check the multi-unit culverts in your area to see if they qualify under the "definition of a bridge."

A list of all locally owned bridges in Michigan has been posted on the Michigan Department of Transportation's (MDOT) web site: http://www.michigan.gov/documents/mdot_Local_Bridge_Data_for_FSR_and_Call_for_Applications_148254_7.pdf. This list includes the Federal Sufficiency Rating (FSR) value for each bridge. An FSR value between 80 and 100 indicates the structure is eligible for preventive maintenance, a value between 50 and 80 indicates the structure is eligible for rehabilitation, and a value between 0 and 50 indicates the structure is eligible for replacement. The specific work being applied for in preventive maintenance and rehabilitation categories must be listed.

Enclosed is a 2006 scoping document which indicates per unit cost estimates of various rehabilitation options. This will be helpful in determining the estimated construction costs for different types of repairs. All estimates for projects to be constructed in 2010 should incorporate an annual inflationary factor of 4 percent.

Replacement:

Replacement projects involve replacing the entire substructure, superstructure, deck and necessary approach work.

For replacement projects, at a minimum, the average cost per square foot of proposed bridge deck area should be estimated at \$180 for rural roadways and \$200 for urban roadways. The approach costs should be estimated using, at a minimum, \$25,000 per station with a minimum approach cost of \$100,000. The minimum overall estimated cost for a replacement project including approach work should be \$300,000. The cost estimate needs to include public utility work affected by the project and the design needs to meet the current American Association of State Highway and Transportation Officials (AASHTO) guidelines.

Rehabilitation:

Based on the federal Highway Bridge Program (HBP), rehabilitation is defined as "The major work required to restore the structural integrity of a bridge as well as work necessary to correct major safety defects."

For bridge rehabilitation projects, the estimated repair costs will vary by the type of work. Examples of rehabilitation work eligible for funding under this program are:

- Full deck replacement (with or without painting of steel beams)
- Deep overlay on deck (removing and replacing the concrete surface below the top mat of steel reinforcement)
- Superstructure replacement
- Structure widening
- Demolition of existing bridge

Preventive Maintenance:

Preventive Maintenance activities are now eligible for funding under the Local Bridge Program. Examples of Preventive Maintenance are:

- Painting only (full, zone or spot painting)
- Pin and Hanger replacement
- Slope paving repair
- Joint replacement and repair
- Drainage system repair (bridge deck drains and bridge approach downspouts)
- Scour countermeasures
- Concrete crack sealing
- Concrete patching and repair
- Approach pavement relief joint installation
- HMA overlay
- Shallow deck overlay (removing and replacing concrete surface above the top mat of steel reinforcement)
- Temporary Supports
- Expansion or Construction joint repair
- Guard Rail Beam retrofit or installation

Mr. John D. Niemela and Mr. Joseph A. Fivas

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The data found on the Structure Inventory and Appraisal (SI&A) form is used in many of the formula rating point calculations and is one item looked at by your Regional Bridge Council when considering discretionary rating points. It is very important that this data be current and correct before submitting the application; incorrect data may significantly affect the rating points. When completing an application, the data stated in the supporting documents must match the data found in the SI&A form. Conflicting information may be cause to reject an application.

Applications will be reviewed for completeness and preliminary (computer generated) rating points will be assigned. Site visits will be performed with written reports created by MDOT's Local Agency Bridge staff. The applications, preliminary rating points, and the site visit reports will then be forwarded to the respective Regional Bridge Council for their review and the addition of the discretionary rating points.

The preventive maintenance, structure rehabilitation and replacement, and approach construction costs may be eligible for a maximum of 95 percent participation from federal and/or state funds. The right of way, design engineering, and construction engineering costs are not eligible for Local Bridge Program funds.

All applications must include the requirements listed on the enclosed pages. All bridge applications submitted in previous years that have not been selected for funding have been discarded. The Regional Bridge Councils and the Local Bridge Advisory Board will only consider applications submitted during the current year's call. Incomplete applications will be rejected and will be returned to the local agency.

Applications must be postmarked **no later than June 1, 2007. Applications postmarked after June 1, 2007 will be rejected and returned to the local agency.** We encourage you to submit your applications early if they are complete.

If you have any questions, or need further information, please contact Mr. Mark C. Harrison, Bridge Program Manager, at (517) 373-2346 or Mr. Carl L. Smith, Bridge Technical Specialist, at (517) 335-2227.

Sincerely,



Mark A. Van Port Fleet
Engineer of Design

Enclosure

APPLICATION REQUIREMENTS

(Standard & Emergency Applications)

1. Include the most recent Structure Inventory and Appraisal (SI&A) Form and Bridge Inspection Form (BIR). These forms must have been updated within the 24-month period, prior to June 1, 2007. The data found on the SI&A form is used in many of the formula rating point calculations and is one item looked at by your Regional Bridge Council when considering discretionary rating points. It is very important that this data be current and correct before submitting the application; incorrect data may significantly affect the rating points. The SI&A and BIR forms must be updated electronically on MBIS, MDOT's new system, prior to the June 1, 2007, deadline. Do not send in any marked up forms as we can not update the data for you.
2. Submit a legible map (8 ½" X 11") showing:
 - a. Emergency facilities such as fire stations, hospitals or police stations.
 - b. Schools and other significant traffic generating facilities.
 - c. The alternate routes or detours which must be used as a result of load limits or closures.
 - d. Do not color code this map, it will be reproduced on a black & white copier.
3. For all applications, include a minimum of two photographs of the following:
 - a. One showing the structure's alignment.
 - b. One showing the structure's profile view.
 - c. If the bridge is posted, include one photograph of the bridge clearly showing the current posting sign. These photos need to be of good quality in order to reproduce copies on a black & white copier.
4. For **rehabilitation** and **Preventive Maintenance** applications, also include photographs of the following:
 - a. The deck showing the areas of delamination and patches.
 - b. The substructure units showing areas of delaminations/spalls.
 - c. The beams showing areas of cracks and delamination for concrete and local areas of corrosion and/or local failure for steel.
 - d. The photos need to be of good quality in order to reproduce copies on a black and white copier.
5. Submit a narrative which includes the following:
 - a. The responsible local agency contact person's name, title and telephone number.
 - b. **Clearly indicate whether the application is for rehabilitation, replacement, and preventive maintenance. For rehabilitation and preventive maintenance, clearly specify work requested for funding.**
 - c. A statement explaining the economic importance of the structure.
 - d. In a short paragraph, if there is currently a detour for the structure, explain "Existing detour currently affects"
 - e. In a short paragraph, if the structure is or would be closed, explain "If the structure is closed, the detour would affect...."
 - f. If the structure is closed, what year the structure was closed.
 - g. A statement of any maintenance done on the structure either past or present.
6. Submit a breakdown of the estimated replacement, rehabilitation, and preventive maintenance as follows:
 1. Right of Way (if any) (1) \$ _____
 2. Design Engineering (2) \$ _____
 3. Construction Engineering (3) \$ _____

Total (1,2,&3)

Total \$ _____

A. Approach Construction

(A) \$ _____

B. Structure Construction

(B) \$ _____

Total (A & B)

Total \$ _____

7. Submit a **"Priority List"** listing all the structures that you want rated. Any application not containing a total priority list of all applications will be considered incomplete, and will be rejected and returned to the owner.
8. **For each application**, submit a current resolution, signed and dated, from the governing board supporting the project. Resolutions from previous applications will not be accepted. Letters of local support are recommended but are not mandatory.
9. Do not staple the application together or put in a booklet or binder, as it needs to be reproduced on a black & white copier.
10. Any application that is not complete will be rejected and returned to the local agency. Common examples of incomplete applications are those that are missing updated SI&A forms, photos of postings, load ratings, missing resolutions, and priority lists. A complete application must be postmarked by the June 1, 2007, deadline.
11. All applications must have a Federal Sufficiency Rating, FSR, value between 0 and 100. A list of all locally owned bridges in Michigan with their respective FSR values has been placed on MDOT's website. For replacement projects, the FSR value must be less than 50. For rehabilitation projects, the FSR value must be between 50 and 80. For preventive maintenance projects, the FSR value must be between 80 and 100.
12. Previous years' applications have been discarded. The Regional Bridge Councils and the Local Bridge Advisory Board will only review applications submitted during the current call for applications. After the applications have been reviewed and projects have been selected for funding, all non-funded bridge applications will be discarded.
13. Clearly indicate whether the application is for rehabilitation, replacement, or preventive maintenance. For rehabilitation and preventive maintenance, clearly specify the work requested for funding.

All applications must be submitted directly by the **LOCAL AGENCY** (not their consultant) to:

Carl L. Smith
Local Agency Programs-Design Support Area, MDOT
Van Wagoner Building
425 West Ottawa Street
P.O. Box 30050
Lansing, Michigan 48909
Phone: (517) 335-2227

2006

CALL FOR PROJECTS BRIDGE REPAIR COST ESTIMATE

REV. 10/18/06

ENGINEER:

DATE:

DECK AREA:

SFT

STRUCTURE ID:

LOCATION:

DECK DIM:

PRIMARY REPAIR STRATEGY:

STR. TYPE:

WORK ITEM	QUANTITY	DIMENSION	UNIT COST	TOTAL
NEW BRIDGE				
Multiple spans, Concrete (add demo. & road approach & traffic control)		SFT	\$125.00 /SFT	
Multiple spans, Steel (as above)		SFT	\$135.00 /SFT	
Single span (or multi span over water) (as above)		SFT	\$150.00 /SFT	
Pedestrian Overpass		SFT	/SFT	
Other				
NEW SUPERSTRUCTURE				
Concrete (includes removal of old super & new railing, add traffic control & approach)		SFT	\$95.00 /SFT	
Steel (as above)		SFT	\$115.00 /SFT	
Over Water (add to new superstructure cost)		SFT	\$20.00 /SFT	
Other				
WIDENING				
Added portion only. _____ ft of width (add road approach widening)		SFT	\$150.00 /SFT	
Other				
NEW DECK				
Includes removal of old deck & new railing (add traffic control & approach)		SFT	\$65.00 /SFT	
Other				
DEMOLITION				
Entire bridge, grade separation		SFT	\$24.00 /SFT	
Entire bridge, over water		SFT	\$31.00 /SFT	
Other				
SUPERSTRUCTURE REPAIR				
Concrete Deck Patch (includes hand chipping)		SFT	\$35.00 /SFT	
HMA Cap (no membrane - add bridge rail if req'd)		SFT	\$1.25 /SFT	
HMA Overlay with WP membrane (add bridge rail if req'd)		SFT	\$5.50 /SFT	
Removal of Concrete Wearing Course (latex) or Epoxy Overlay		SFT	\$3.35 /SFT	
Removal of HMA Overlay		SFT	\$1.10 /SFT	
Epoxy Overlay		SYD	\$35.00 /SYD	
Shallow Overlay (includes joint replmt & hydro, add bridge rail if req'd)		SFT	\$21.00 /SFT	
Deep Overlay (includes joint replmt & hydro, add bridge rail if req'd)		SFT	\$23.00 /SFT	
PCI Beam End Repair (\$2000-\$4000 per beam end)		EA	\$3,000.00 EA	
Repair Structural Steel (\$2000 bolted, \$6000 welded)		EA	\$5,000.00 EA	
Paint Structural Steel		SFT	\$8.50 /SFT	
Partial Painting		SFT	\$12.75 /SFT	
Pin & Hanger replacement (includes temporary supports)		EA	\$6,700.00 EA	
Other				
SUBSTRUCTURE REPAIR				
Pier repair (measured x 2) Replace unit if spalled area > 30%		CFT	\$200.00 /CFT	
Pier repair over water (measured x 2)		CFT	\$225.00 /CFT	
Pier replacement		CFT	\$55.00 /CFT	
Abutment repair (measured x 2)		CFT	\$200.00 /CFT	
Temporary Supports for Substructure Repair		EA	\$1,500.00 EA	
Slope Protection repairs		SYD	\$66.00 /SYD	
Other				
MISCELLANEOUS				
Expansion or Construction Joints (includes removal)		FT	\$440.00 /FT	
Bridge Railing, remove and replace		FT	\$250.00 /FT	
Thrie Beam Railing retrofit		FT	\$30.00 /FT	
Deck Drain Extensions		EA	\$300.00 EA	
Scour Countermeasures		LSUM		LSUM
Other				
ROAD WORK				
Approach Pavement, 91/2" RC (add C & G, GR, Slope, Shldr.) 40' ea. end		SFT	\$8.00 /SFT	
Approach Curb & Gutter (18' ea. quad.)		FT	\$38.00 /FT	